

# **NORTH AMERICA INTERNATIONAL PATENT OFFICE**

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**OCT 22 2004**

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**Tel: (571) 272-1746**

**ART UNIT: 2816**

**Fax: (703) 872-9306**

**FROM: Winston Hsu, PATENT AGENT, REG. NO.: 41,526**

**SERIAL NO.: 09/682,303**

**ATTORNEY DOCKET NO.: NAUP0303USA**

**SUBJECT: INFORMATION DISCLOSURE STATEMENT**

**TOTAL PAGES: 22 PAGES (INCLUDING COVER PAGE)**

**Winston Hsu 2004/10/22**

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**Subject: Re-submission of a previous submitted fax**

**Dear Sir or Madam,**

This fax is a re-submission of a previous submitted fax which was sent to the above identified fax number at 02:16 AM, 10/21/2004. In the previous submission process, the fax machine failed to automatically generate a fax confirmation report. The undersigned agent has no idea whether the previous submission is completed or not. In order to avoid abandonment or delay of the correspondent U.S. patent application, the undersigned agent decides to resend this fax. If you find out that the previous fax submission is completed and the current fax becomes a redundant copy of the previous submitted fax, you can ignore this fax and use the previous fax as the formal response.

Thank you very much for your help.

**NAUP0303USA0\_D1\_1**

PTO/SB/97 (09-04)

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Telephone Number

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(1) Transmittal Form	1 PAGE
(2) Fee Transmittal	1 PAGE
(3) Information Disclosure Statement	18 PAGES

This collection of information is required by 37 CFR 1.8. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1.8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	09/682,303	
	Filing Date	08/16/2001	
	First Named Inventor	Jui-Lung Chen	
	Art Unit	2816	
	Examiner Name	LUU, AN T	
Total Number of Pages In This Submission	20	Attorney Docket Number	NAUP0303USA

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		
<b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT</b>		
Firm Name	North America Intellectual Property Corporation	
Signature	<i>Winston Hsu</i>	
Printed name	Winston Hsu	
Date	10/21/2004	Reg. No. 41,526

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I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:		
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Typed or printed name		Date

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**FEE TRANSMITTAL**  
**for FY 2005**

Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$ ) 180.00**Complete If Known**

Application Number	09/682,303
Filing Date	08/16/2001
First Named Inventor	Jui-Lung Chen
Examiner Name	LUU, AN T
Art Unit	2816
Attorney Docket No.	NAUP0303USA

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:

Deposit Account Number	50-3105
Deposit Account Name	North America Intellectual Property Corp.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 790	2001 395	Utility filing fee	
1002 350	2002 175	Design filing fee	
1003 550	2003 275	Plant filing fee	
1004 790	2004 395	Reissue filing fee	
1005 180	2005 80	Provisional filing fee	
<b>SUBTOTAL (1)</b>			<b>(\$ ) 0.00</b>

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	
Multiple Dependent	-3** =	X	

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1202 18	2202 9	Claims in excess of 20	
1201 88	2201 44	Independent claims in excess of 3	
1203 300	2203 150	Multiple dependent claim, if not paid	
1204 88	2204 44	** Reissue independent claims over original patent	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	
<b>SUBTOTAL (2)</b>			<b>(\$ ) 0.00</b>

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 430	2252 215	Extension for reply within second month	
1253 880	2253 490	Extension for reply within third month	
1254 1,530	2254 765	Extension for reply within fourth month	
1255 2,080	2255 1,040	Extension for reply within fifth month	
1401 340	2401 170	Notice of Appeal	
1402 340	2402 170	Filing a brief in support of an appeal	
1403 300	2403 150	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,370	2501 685	Utility issue fee (or reissue)	
1502 490	2502 245	Design issue fee	
1503 660	2503 330	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	180
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 790	2809 395	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 790	2810 395	For each additional invention to be examined (37 CFR 1.129(b))	
1801 790	2801 395	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$ ) 180.00**SUBMITTED BY**

Name (Print/Type)	Winston Hsu	Registration No. (Attorney/Agent)	41,526	Telephone	886-2-89237350
Signature	<i>Winston Hsu</i>	Date	10/21/2004		

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PTO/SB/08A (08-03n)

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	1
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### Complete if Known

Application Number	09/682,303
Filing Date	08/16/2001
First Named Inventor	Jui-Lung Chen
Art Unit	2816
Examiner Name	LUU, AN T
Attorney Docket Number	NAUP0303USA

## U. S. PATENT DOCUMENTS

[illegible]

**FOREIGN PATENT DOCUMENTS**

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>2</sup>
		Country Code* Number *Kind Code* (if known)				
	1	JP 199813219A	01-16-1998	Ishii Susumu		+

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Jui-Lung Chen Shih-Huang Huang  
5 Examiner: An T. Luu  
Filing Date: 08/16/2001 Art Unit: 2816  
App. No.: 09/682,303 Docket No.: NAUP0303USA  
10 Title: DELAY LOCK CIRCUIT USING BISECTION ALGORITHM AND  
RELATED METHOD

To: Commissioner of Patents  
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OCT 22 2004

15 Subject: Information disclosure statement Under  
37C.F.R. \$1.56 and 37C.F.R. \$1.97(d).

20 Dear Sir or Madame:

This is an Information Disclosure Statement in accordance  
with the duty to disclose information material to  
25 patentability under 37 C.F.R. \$1.56. Applicants wish to make  
of record the document listed on the accompanying form  
PTO/SB/08. It is respectfully requested that the Examiner  
initial the cited references on the form and that it be made  
of record in the application and that a copy of the initialed  
30 form be sent to Applicants with the next communication from  
the Examiner.

Since the IDS is filed after the mailing date of a notice of allowance, and on or before a payment of the issue fee, the requirement set forth in §1.97(d) is satisfied. Items of information contained in the information disclosure statement  
5 were cited in communication from PRC Patent Office on 07/25/2004 for a counterpart foreign application.

The cited reference, JP publication number No. H10-13219, teaches a DLL circuit. As shown in Fig.1, the block  
10 diagram discloses a configuration of the cited art DLL circuit 14. The DLL circuit 14 comprises a phase detector 11 for comparing the phase difference between the external clock signal 6 and the internal clock signal 7, a control signal generating circuit 13 for generating a control signal  
15 according to the comparison results 8-1, 8-2, 9-1, 9-2, and 10 of the phase detector 11, a plurality of delay units 3 for delaying the external clock signal 6, a multiplexer 4 for selecting a certain number of the delay units 3 according to the control signal outputted from the control signal  
20 generating circuit 13, and a clock driver 5 for generating the internal clock signal 7 according to the selected delay units. A delay unit 3 is a smallest unit, which delays the external clock signal 6. Since the control signal generating circuit 13 is capable of determining a total number of used  
25 delay unit 3 according to a comparison result generated from the phase detector 11, it transmits the control signal to the multiplexer 4 for driving the multiplexer 4 to select the required delay units 3.

30 Independent Claim 11 of the present invention, listed in the response to the Office action dated 06/03/2004, is repeated here for reference.

11. A delay lock circuit for generating a second clock according to a first clock and synchronizing the first clock and the second clock, the delay lock circuit comprising:

5 a comparator for determining if corresponding periods of the first clock and the second clock are synchronized and generating a corresponding comparison signal;

10 a delayer electrically connected to the comparator for delaying the first clock so as to change a delay time between the corresponding periods of the first clock and the second clock; and

a controller to control the delay lock circuit; wherein the controller uses the delayer to perform a

15 correcting process to increase or decrease the delay time between the corresponding periods of the first clock and the second clock by a correction interval, wherein a **subsequent correction interval of a subsequent correcting process is less than a previous correction interval of a**

20 **previous correcting process**, and the controller terminates the correcting process if the correction interval is smaller than a predetermined value.

However, the cited reference fails to teach or suggest

25 that **"a subsequent correction interval of a subsequent correcting process is less than a previous correction interval of a previous correcting process."** Based on the above difference, it is believed that claim 11 is substantially different from the cited reference. And claims 12-14 are

30 dependent on claim 11, they are believed to be substantially different from the cited reference.



Independent Claim 16 of the present invention, listed in the response to the Office action dated 06/03/2004, is repeated here for reference.

- 5 16. A method for performing a delay lock to generate a second  
clock according to a first clock and to synchronize the  
second clock with the first clock, the method comprising:  
executing a plurality of correcting processes, each of  
which increases or decreases by a respective  
10 correction interval a respective delay time between  
corresponding periods of the first clock and the  
second clock; and  
terminating the plurality of correcting processes when  
the correction interval is smaller than a  
15 predetermined value;  
wherein a subsequent correction interval for a subsequent  
correcting process is less than a previous correction  
interval of a previous correcting process.
- 20 Similarly, as mentioned above, the cited reference fails  
to teach or suggest that **"a subsequent correction interval  
of a subsequent correcting process is less than a previous  
correction interval of a previous correcting process."** Based  
on the above difference, it is believed that claim 16 is  
25 substantially different from the cited reference. And claims  
17-24 are dependent on claim 16, they are believed to be  
substantially different from the cited reference.

Sincerely yours,

5 Winston Hsu

Date: October 21, 2004

Winston Hsu, Patent Agent No. 41,526

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